April 24, 1959

Subject: SPO 71696

STATINTL

TO: [redacted]

FROM: [redacted]

1. Is there a star tracker in vehicle? If so, how good is it?

2. Does the vehicle have stable platform, and if so, how good.

3. Could optical system be attached to the stable platform in (2).

4. What are the stability characteristics of the vehicle itself.

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STATINTL

Estimated Power requirements for [redacted]

| | |
|---|---|
| 28± 1V D.C. | 250-750 watts |
| 400± 10 cycles | 3 phase 110 ± 5 volts |
| | 300 - 750 volt-amperes |

5. What is the vibration spectrum of the vehicle?

6. Does the vehicle contain any device which measures altitude and ground speed with an accuracy of ±1% or better?

Needs

Approx. 1000 W power, ± 500 W

Environment per ER5394, pg. 84

Questions

Size estimate, including possibility of minor changes

Window

Who (Vehicle or us) does what

Dimension limits

Aerodynamic effects of different thermal resistance at window

Window seals

Wind tunnel data

Information (Electrical) available

Velocity relative to ground

Altitude relative to ground

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Stabilization (angular rates)

Positioning (angular positions)

Characteristics of vehicle

Vibration (amplitude vs. frequency)

Stability (angular position vs. frequency)

Altitude as a function of flight time

Angle of attack as a function of flight time

Temperature as a function of flight time

Power available and regulation accuracy

Pre-flight checkout concept